

Attorney Docket No.: DRE-0111
Inventor: El-Raghy and Barsoum
Serial No.: 10/666,639
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REMARKS

Claims 1-3 are pending in the instant application. Claims 1-3 have been rejected. Reconsideration is respectfully requested in light of the following remarks.

I. Rejection of Claims 1-3 under 35 U.S.C. 102(e) or 103(a)

Claims 1 and 2 have been rejected under 35 U.S.C. 102(e) as being anticipated by Gromelski (WIPO Publication WO 03/051791).

Claim 3 has been rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gromelski (WIPO Publication WO 03/051791) in view of prior art described by Applicant at pages 1-2 of the specification.

Applicants respectfully traverse these rejections.

For proper citation of a reference under 35 U.S.C. 102(e), the reference must be "by another".

Applicants are submitting herewith a Declaration by co-inventor Dr. Tamer El-Raghy outlining events and correspondence between Dr. El-Raghy and Dr. Stanley Gromelski of Ansell Healthcare Products relating to subject matter disclosed in WO 03/051791). As shown by the electronic mail messages exchanged between Dr. El-Raghy and Dr. Gromelski between August of 1999 and

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August of 2001 (provided as Exhibits A through J of Dr. El-Raghy's Declaration) Dr. El-Raghy and Dr. Barsoum participated in both the conception as well as reduction to practice of the MAX phase articles and formers and methods for their production as set forth in WO 03/051791.

Specifically, it was scientists of Drexel University who first proposed to Dr. Gromelski to test bulk ternary ceramic Ti_3SiC_2 in Ansell's KOH accelerated test cycle to determine whether purer starting material would resolve problems with respect to the dissolution of coatings from underlying ceramic coatings. See paragraph 4 and 5 as well as Exhibits A and B of Dr. El-Raghy's Declaration. Dr. Gromelski specifically acknowledged in writing this to be the "idea" of Drexel University scientists. See paragraph 6 as well as Exhibit C of Dr. El-Raghy's Declaration. Further, Dr. Gromelski specifically requested in writing from Dr. El-Raghy, details to slip-cast a glove former of this material including temperature needed for fire molding and any other special conditions needed to handle the material. See paragraph 7 and Exhibit D of Dr. El-Raghy's Declaration. As discussed in paragraph 8 of Dr. El-Raghy's Declaration, Dr. El-Raghy provided such details in writing to Dr. Gromelski (also see Exhibit E). Some of the details set forth

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in Dr. El-Raghy's e-mail of September 13, 1999, for example, the temperature range of 1400-1600, are taught in WO 03/051791 (see page 5, lines 16-18 and lines 30-32 of WO 03/051791). As discussed in paragraphs 10 and 11 of Dr. El-Raghy's Declaration and evidenced by Exhibit G and H, Dr. El-Raghy even proposed in writing that a provisional patent application, jointly owned by Drexel University and Ansell Perry, be pursued and Dr. Gromelski positively acknowledged this proposal in writing, stating that Ansell would be agreeable to pursuing a joint application for patent and was interested in slip casting the material to mold a glove-condom former. As discussed in paragraph 12 of Dr. El-Raghy's Declaration, Dr. El-Raghy then advised that the know-how to slip cast this material would need to be developed. In June of 2000 Drexel University entered into a Sponsored Research Agreement with Ansell and Dr. El-Raghy and Dr. Barsoum proceeded to develop a slip-casted glove which was tested by Ansell in its KOH accelerated test cycle. See paragraph 13 of Dr. El-Raghy's Declaration. As made clear in Dr. Gromelski's emails of August 2001 (attached as Exhibit J), the accelerated ageing of the subject slip-cast glove former was progressing well. At that same time Dr. Gromelski requested that Dr. El-Raghy provide costing information of the material and processing and technical

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literature on the ceramic, how it is produced and its typical uses. See paragraph 14 of Dr. El-Raghy's Declaration.

These events, which all occurred prior to the December 18, 2001 priority date of WO 03/051791, make clear that any overlapping subject matter between teachings of WO 03/051791 and the instant application relating to MAX phase condom and glove formers is not the work of another, but rather represents the contributions of the instant co-inventors Dr. Tamer El-Raghy and Dr. Michel Barsoum.

Thus, WO 03/051791 is not the work of another and therefore is not a valid prior art reference under 35 U.S.C. 102(e).

Withdrawal of these rejections under 35 U.S.C. 102(e) and 35 U.S.C. 103(a) is therefore respectfully requested.

II. Rejection of Claims 1-3 under 35 U.S.C. 103(a)

Claims 1 and 2 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Adasch (U.S. Patent 5,194,204) in view of Barsoum (J. Am. Ceram. Soc. 79[7] (1996) 1953-56). The Examiner suggests that it would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to use Ti_3SiC_2 as a glove former in view of Adasch's teaching that thermal shock resistance, high thermal conductivity, and

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corrosion resistance were favorable qualities for a glove former and in view of Barsoum's teachings that Ti_3SiC_2 had all of these qualities.

Claim 3 has been rejected under 35 U.S.C. 103(a) as being unpatentable over (U.S. Patent 5,194,204) in view of Barsoum (J. Am. Ceram. Soc. 79[7] (1996) 1953-56) and further in view of Hadfield (U.S. Patent 1,635,576). The Examiner suggests that it would have been prima facie obvious to one of ordinary skill in the art to use the method of Hadfield for forming gloves with the apparatus and composition of Adasch and Barsoum because doing so would produce useful gloves that could be sold for significant financial benefit.

Applicants respectfully traverse these rejections.

At the outset, it is respectfully pointed out that, contrary to the Examiner's suggestion, no where does Barsoum and El-Raghy (J. Am. Ceram. Soc. 79[7] (1996) 1953-56) teach that the Ti_3SiC_2 is corrosion resistant to acids or bases. It is only the instant specification which teaches MAX phase samples to exhibit excellent corrosion resistance to both acids and alkalis (see teachings in instant specification at page 6, lines 17-24).

Nor would this characteristic necessarily be expected of a MAX phase having properties of both metal and ceramics (see

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teachings in specification at page 5, lines 21-30), particularly in light of teachings of U.S. Patent 5,194,204 that metal formers are corroded by alkaline and acid cleaning agents. See col. 1, lines 9-16 of U.S. Patent 5,194,204.

Accordingly, this combination of prior art references provides neither a motivation to make the suggested substitution of a MAX phase instead of silicized silicon carbide into the former of U.S. Patent 5,194,204 nor any reasonable expectation of success with respect to the suggested substitution of a MAX phase instead of silicized silicon carbide into the former of U.S. Patent 5,194,204. Thus, the cited combination of prior art does not meet the basic criteria as set forth in MPEP 2143 to render the instant invention obvious.

Withdrawal of these rejections under 35 U.S.C. 103 is therefore respectfully requested.

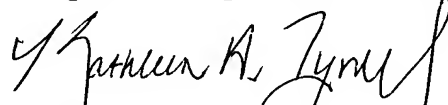
III. Conclusion

Applicants believe that the foregoing comprises a full and complete response to the Office Action of record. Accordingly,

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favorable reconsideration and subsequent allowance of the pending claims is earnestly solicited.

Respectfully submitted,



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